

9097250 TOSHIBA (DISCRETE/OPTO)

90D 16010 DT-33-35

# TOSHIBA SEMICONDUCTOR

## TECHNICAL DATA

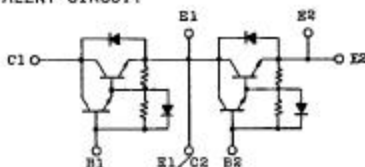
TOSHIBA GTR MODULE  
 MG50G2YL1A  
 SILICON NPN TRIPLE DIFFUSED TYPE

HIGH POWER SWITCHING APPLICATIONS.  
 MOTOR CONTROL APPLICATIONS.

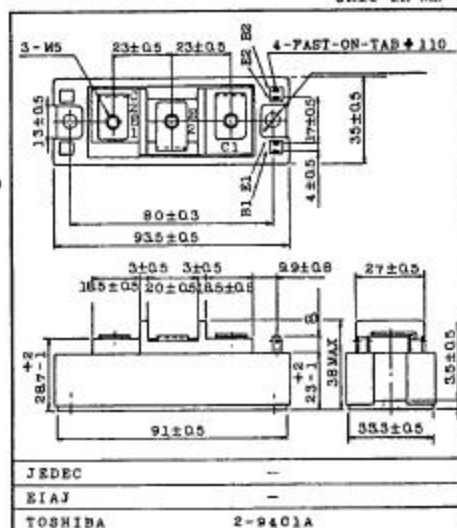
## FEATURES:

- The Collector is Isolated from Case.
- 2 Power Transistors and 2 Free Wheeling Diodes are Built-in to 1 Package.
- High DC Current Gain:  $h_{FE}=100(\text{Min.})(I_C=50A)$
- Low Saturation Voltage  
 $V_{CE(sat)}=2V(\text{Max.})(I_C=50A)$
- High Speed :  $t_f=2\mu s(\text{Max.})(I_C=50A)$

## EQUIVALENT CIRCUIT



Unit in mm



Weight : 222g

MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CB0}$	600	V
Collector-Emitter Sustaining Voltage		$V_{CEX(SUS)}$	600	V
		$V_{CEO(SUS)}$	450	
Emitter-Base Voltage		$V_{EB0}$	6	V
Collector Current	DC	$I_C$	50	A
	1ms	$I_{CP}$	100	
Forward Current	DC	$I_F$	50	A
	1ms	$I_{FM}$	100	
Base Current		$I_B$	5	A
Collector Power Dissipation ( $T_c=25^\circ\text{C}$ )		$P_C$	300	W
Junction Temperature		$T_j$	150	$^\circ\text{C}$
Storage Temperature Range		$T_{stg}$	-40-125	$^\circ\text{C}$
Isolation Voltage		$V_{isol}$	2500 (AC 1 Minute)	V
Screw Torque (Terminal/Mounting)		-	20/30	kg·cm

MG50G2YL1

TOSHIBA CORPORATION